

Chapter 5 Preview
Relationships in Triangles
Geometry

Name _____

Date _____

Define the following:

- | | |
|---------------------------|----------------------------|
| 1. Perpendicular Bisector | 7. Centroid |
| 2. Concurrent Lines | 8. Altitude |
| 3. Point of Concurrency | 9. Orthocenter |
| 4. Circumcenter | 10. Indirect Reasoning |
| 5. Incenter | 11. Indirect Proof |
| 6. Median | 12. Proof by Contradiction |

You *should* be able to do the following objectives:

1. How do you identify and use perpendicular bisectors in triangles?
2. How do you identify and use angle bisectors in triangles?
3. How do you use medians in triangles?
4. How do you identify and use altitudes in triangles?
5. How do you recognize and apply properties of inequalities to the measures of the angles of a triangle?
6. How do you recognize and apply properties of inequalities to the relationships between the angles and sides of a triangle?
7. How do you write indirect algebraic proofs?
8. How do you indirect geometric proofs?
9. How do you use the Triangle Inequality Theorem to identify possible triangles?
10. How do you prove triangle relationships using the Triangle Inequality Theorem?
11. How do you apply the Hinge Theorem or its converse to make comparisons in two triangles?
12. How do you prove triangle relationships using the Hinge Theorem or its converse?

If you can give a good definition for each term without having to look it up, then you should be ready to identify these terms for application. If you can describe a method as to how to perform each of the objectives, then you should be ready to perform these tasks. If there are any terms or objectives that you are unsure about, then these are the things you want to take extra time studying.

Use this Preview Sheet to help keep yourself organized as we progress through Chapter 5. Refer back to it. Understand the concepts that are included.

Check the class wiki for summary assignments and bonus.